

IN THE CLAIMS

Please cancel claims 8, 18, 27 and 33 without prejudice.

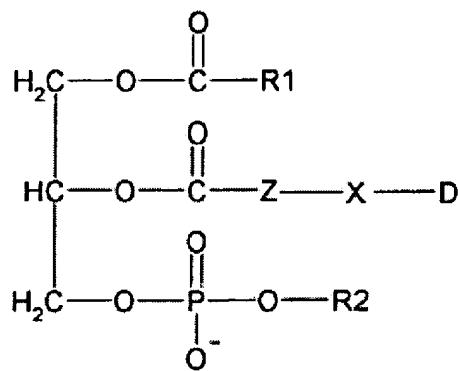
Please amend claims 1, 10, 11, 20 and 30 as indicated below.

Please withdraw claims 28-32 from consideration herein.

The listing of claims below will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of the general formula I



Formula I

or a pharmaceutically acceptable salt thereof, wherein:

R1 is a saturated or unsaturated, ~~substituted or unsubstituted~~ hydrocarbon chain having from 2 to 30 carbon atoms;

R2 is H or a phospholipid head group;

D is the residue of a nonsteroidal anti-inflammatory drug having a functional group selected from the group consisting of carboxyl, hydroxyl, amine and thiol ibuprofen, wherein D is attached through said a functional group to a bridging group, -C(O)-Z-X-, wherein Z is a saturated or unsaturated hydrocarbon chain having from 2 to 15 carbon atoms, and X is selected from an amino, hydroxy, thio and carbonyl groups, such that when the functional group of D is

~~carboxyl, X is selected from amino, hydroxy and thio, and when the functional group of D is amino, hydroxy or thio, X is a carbonyl group.~~

2. (Previously Presented) The compound according to claim 1, wherein the conjugated residue of the nonsteroidal anti-inflammatory drug is pharmacologically inactive.

3. (Original) The compound according to claim 1, wherein an ester bond at position sn-2 of the phospholipid of the general formula I is cleaveable by a lipase.

4. (Original) The compound according to claim 3, wherein said lipase is a phospholipase.

5. (Original) The compound according to claim 4, wherein said phospholipase is phospholipase A₂ (PLA₂).

6. (Original) The compound according to claim 1, wherein R1 is an hydrocarbon chain having from 10 to 20 carbon atoms.

7. (Original) The compound according to claim 1, wherein R1 is an hydrocarbon chain having 15 or 17 carbon atoms.

8. (Canceled)

9. (Original) The compound according to claim 1, wherein R2 is selected from the group consisting of choline, ethanolamine, inositol and serine.

10. (Previously Presented) The compound according to claim 1 selected from the group consisting of:

~~1-Stearoyl-2-[3-[2-(2,6-dichloroanilino)phenylacetamido]propanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[4-[2-(2,6-dichloroanilino)phenylacetamido]butanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[5-[2-(2,6-dichloroanilino)phenylacetamido]valeroyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[6-[2-(2,6-dichloroanilino)phenylacetamido]hexanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[8-[2-(2,6-dichloroanilino)phenylacetamido]octanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[12-[2-(2,6-dichloroanilino)phenylacetamido]dodecanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[3-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindolylacetamido]propanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[4-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindolylacetamido]butanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[5-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindolylacetamido]valeroyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[6-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindolylacetamido]hexanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[8-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindolylacetamido]octanoyl]-sn-glycero-3-phosphocholine,~~

1-Stearoyl-2-[3-[α -methyl-4-(2-methylpropyl)benzeneacetamido] propanoyl]-sn-glycero-3-phosphocholine, and

1-Stearoyl-2-[6-[α -methyl-4-(2-methylpropyl)benzeneacetamido] hexanoyl]-sn-glycero-3-phosphocholine,

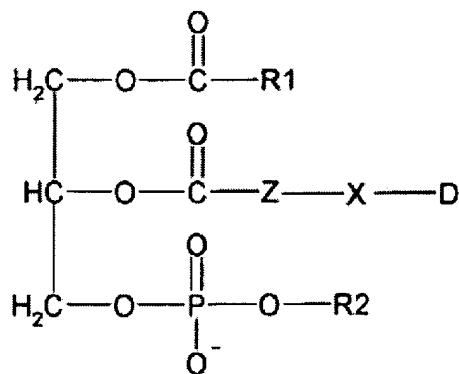
~~1-Stearoyl-2-[3-[(S)-6-methoxy- α -methyl-2-naphthaleneacetamido] propanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[4-[(S)-6-methoxy- α -methyl-2-naphthaleneacetamido] butanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[6-[(S)-6-methoxy- α -methyl-2-naphthaleneacetamido] hexanoyl]-sn-glycero-3-phosphocholine, and~~

~~1-Stearoyl-2-[4-[2-(6-methoxynaphthyl)acetamido]butanoyl]-sn-glycero-3-phosphocholine.~~

11. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, a compound of the general formula I



Formula I

or a pharmaceutically acceptable salt thereof, wherein:

R1 is a saturated or unsaturated, substituted or unsubstituted hydrocarbon chain having from 2 to 30 carbon atoms;

R2 is H or a phospholipid head group;

~~D is the residue of a nonsteroidal anti-inflammatory drug having a functional group selected from the group consisting of carboxyl, hydroxyl, amine and thiol ibuprofen, wherein D is attached through said a functional group to a bridging group, -C(O)-Z-X- , wherein Z is a saturated or unsaturated hydrocarbon chain having from 3 to 15 carbon atoms, and X is selected from an amino, hydroxy, thio and carbonyl groups, such that when the functional group of D is carboxyl, X is selected from amino, hydroxy and thio, and when the functional group of D is amino, hydroxy or thio, X is a carbonyl group.~~

12. (Previously Presented) The pharmaceutical composition according to claim 11, wherein -C(O)-Z-X-D is an inactive derivative of D.

13. (Original) The pharmaceutical composition according to claim 11, wherein an ester bond at position sn-2 of the phospholipid of the general formula I is cleaveable by a lipase.

14. (Original) The pharmaceutical composition according to claim 13, wherein said lipase is a phospholipase.

15. (Original) The pharmaceutical composition according to claim 14, wherein said phospholipase is phospholipase A₂ (PLA₂).

16. (Original) The pharmaceutical composition according to claim 11, wherein R1 is an hydrocarbon chain having from 10 to 20 carbon atoms.

17. (Original) The pharmaceutical composition according to claim 11, wherein R1 is an hydrocarbon chain having 15 or 17 carbon atoms.

18. (Canceled)

19. (Original) The pharmaceutical composition according to claim 11, wherein R2 is selected from the group consisting of choline, ethanolamine, inositol and serine.

20. (Currently Amended) The pharmaceutical composition according to claim 11, wherein said compound of the general formula I is selected from the group consisting of:

~~1-Stearoyl-2-[3-[2-(2,6-dichloroanilino)phenylacetamido]propanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[4-[2-(2,6-dichloroanilino)phenylacetamido]butanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[5-[2-(2,6-dichloroanilino)phenylacetamido]valeroyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[6-[2-(2,6-dichloroanilino)phenylacetamido]hexanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[8-[2-(2,6-dichloroanilino)phenylacetamido]octanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[12-[2-(2,6-dichloroanilino)phenylacetamido]dodecanoyl]-sn-glycero-3-phosphocholine,~~

~~1-Stearoyl-2-[3-[1-(p-chlorobenzoyl)-5-methoxy-2-methylindolylacetamido]propanoyl]-sn-glycero-3-phosphocholine,~~

1-Stearoyl-2-[4-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl-indolylacetamido]butanoyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[5-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl-indolylacetamido]valeroyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[6-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl-indolylacetamido]hexanoyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[8-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl-indolylacetamido]octanoyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[3-[α -methyl-4-(2-methylpropyl)benzeneacetamido]propanoyl]-sn-glycero-3-phosphocholine, and

1-Stearoyl-2-[6-[α -methyl-4-(2-methylpropyl)benzeneacetamido]hexanoyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[3-[(S)-6-methoxy- α -methyl-2-naphthaleneacetamido]propanoyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[4-[(S)-6-methoxy- α -methyl-2-naphthaleneacetamido]butanoyl]-sn-glycero-3-phosphocholine;

1-Stearoyl-2-[6-[(S)-6-methoxy- α -methyl-2-naphthaleneacetamido]hexanoyl]-sn-glycero-3-phosphocholine, and

1-Stearoyl-2-[4-[2-(6-methoxynaphthyl)acetamido]butanoyl]-sn-glycero-3-phosphocholine.

21. (Previously Presented) The pharmaceutical composition according to claim 11, in the form of solutions, suspensions, capsules, tablets, aerosols, gels, ointments or suppositories.

22. (Previously Presented) The pharmaceutical composition according to claim 11 for oral, ocular, nasal, parenteral, topical or rectal administration.

23. (Original) The pharmaceutical composition according to claim 22 for oral administration.

24. (Original) The pharmaceutical composition according to claim 22 for nasal administration.

25. (Previously Presented) The pharmaceutical composition according to claim 11 for the treatment of a disease or disorder related to an inflammatory condition.

26. (Original) The pharmaceutical composition according to claim 25, wherein said disease or disorder related to an inflammatory condition is selected from the group consisting of arthritis, rheumatoid arthritis, asthma, psoriasis, systemic lupus erythematosus, inflammatory bowel syndrome and the neurological diseases and disorders multiple sclerosis, Alzheimer's disease, Parkinson's disease, Huntington's disease, vascular dementia, epilepsy, migraines, stroke and trauma.

27. (Canceled)

28. (Withdrawn) A method for treatment of a disease or disorder related to an inflammatory condition comprising administering to a patient in need thereof a therapeutically effective amount of a pharmaceutical composition according to claim 11.

29. (Withdrawn) The method according to claim 28, wherein said disease or disorder related to an inflammatory condition is selected from the group consisting of arthritis, rheumatoid arthritis, asthma, psoriasis, systemic lupus erythematosus, inflammatory bowel syndrome and the neurological diseases and disorders multiple sclerosis, Alzheimer's disease, Parkinson's disease, Huntington's disease, vascular dementia, epilepsy, migraines, stroke and trauma.

30. (Currently Amended and Withdrawn) A process for the synthesis of compounds of the general formula I as defined in claim 1, comprising:

(i) providing a molecule y-X-Z-COOH, wherein y is selected from H and OH, Z is a saturated or unsaturated hydrocarbon chain having from 2 to 15 carbon atoms, and X is selected from an amino and thio groups group;

(ii) replacing y with an appropriate blocking group, B, selected from the group consisting of benzyl chloromate, benzyloxycarbonate, diphenylcarbinol and trimethylacetamidocarbinol;

- (iii) preparing an anhydride of the molecule B-X-Z-COOH by employing a reagent to remove one molecule of water from two protected bridging groups;
- (iv) acylating a lyso-lecithin by the anhydride of step (iii) to yield 1-acyl-2-acyl(X-B)-sn-glycero-3 phospholipid by dissolving said anhydride and said lyso-lecithin in an organic solvent in the presence of a catalyst;
- (v) removing the blocking group B from the functional group X; and
- (vi) coupling a nonsteroidal anti-inflammatory drug D comprising ibuprofen to the functional group X in an organic solvent in the presence of reagents that enable a condensation reaction wherein water molecules are removed, thus, generating a molecule of the general Formula I.

31. (Withdrawn) The process according to claim 30 wherein the protected functional group X is -NH.

32. (Withdrawn) The process according to claim 30 wherein the phospholipid of step (iv) is phosphatidylcholine, phosphatidylethanolamine, phosphatidylinositol or phosphatidylserine.

33. (Canceled)